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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,799	10/10/2006	Wim Engelen	MESA 3181	4763
321 7590 08/15/2008 SENNIGER POWERS LLP ONE METROPOLITAN SQUARE 16TH FLOOR ST LOUIS, MO 63102				
EXAMINER REIS, RYAN ALEXANDER				
ART UNIT PAPER NUMBER 3752				
NOTIFICATION DATE DELIVERY MODE 08/15/2008 ELECTRONIC				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@senniger.com

Office Action Summary**Application No.**

10/599,799

Applicant(s)

ENGELEN ET AL.

Examiner

RYAN REIS

Art Unit

3752

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 01/08/2007.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 5,716,007 to Nottingham et al. (Nottingham et al.).

As to claim 1, Nottingham et al. discloses a device for dispensing a liquid, the device comprising a housing (22 and 24), equipped with a trigger (118), and arranged within the housing: an electrical circuit (see Figure 6) comprising a voltage source (104), a switch (114) arranged to be activated by pulling back the trigger, a motor (94), the motor being coupled to a pump (14), for pumping up said liquid from a container (16) and ejecting the liquid through a nozzle (60), characterized in that the housing further comprises: a valve housing (12) comprising a first (30) and second (32) portion, interconnected by an opening (56), an inlet (34) towards the first portion and an outlet

Art Unit: 3752

(at 56) out of the second portion, a valve body (64) arranged inside the first portion, the body comprising a first portion (cylindrical portion of 64) and a dome-shaped portion (66) integrally molded with the first portion, the dome-shaped portion being placed against a valve seat (at 34) formed around the opening, thereby closing off the opening, in the non-operative state of the device, and a piston (46 and 48), in cooperative arrangement with the trigger, the piston being slidably arranged inside the second portion of the valve housing, thereby substantially sealing off the portion from the outside environment, the piston comprising a part (48) which can extend through the opening when the trigger is pulled back, thereby pushing (via the liquid pressure) the dome-shaped portion away from the valve seat (see Figure 5). Nottingham et al. does not expressly disclose the dome-shaped portion being made of a resiliently flexible material.

However, it is well known in the art that valves can be made from flexible materials in order to more closely abut to a valve seat for the purpose of creating a tight seal.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to have made the dome-shaped portion of Nottingham et al. from a flexible material in order to closely abut to the valve seat and create a tight seal.

As to claim 2, Nottingham et al. discloses the first and second portion of the valve housing and the first portion of the valve body are cylindrical in shape (see Figure 3).

As to claim 3, Nottingham et al. discloses the piston is supported by a helical spring (84) which rests on a seat (52), opposite the valve seat, the spring being arranged so that it is compressed when the trigger is pulled back.

As to claim 4, Nottingham et al. discloses the housing is formed by two shell parts (22 and 24) assembled together.

As to claim 6, Nottingham et al. discloses the device is closed at the bottom except for an opening (in bottom of 22) for the passage of a flexible tube (80) which is to be connected to the inlet of the valve housing (at 76).

As to claim 7, Nottingham et al. discloses the device is open at the bottom (at bottom of 22) and comprises means for being attached on top of a liquid bottle (126 from the device mates with 128 from the bottle).

As to claim 8, Nottingham et al. discloses the pump is a gear pump (pumping gears 82 and 98).

Allowable Subject Matter

4. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims. As to claim 5, the prior art of reference does not disclose the limitation of the valve body being held in place inside the valve housing by ribs, which are an integral part of the shell parts.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents 6,752,330 to DiMaggio et al. and 6,997,396 to Fedorov show sprayers with a housing made from two shells, an electric circuit, a trigger, a switch, and a pump. US Patents 5,150,841 to Silvenis et al. and 6,554,211 to Prueter et al. show sprayers with gear pumps and switches.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to RYAN REIS whose telephone number is (571)270-5060. The examiner can normally be reached on Monday through Friday 8:00am to 6:00pm EST.

7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571) 272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3752

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RR/

Examiner, Art Unit 3752

/Len Tran/

Supervisory Patent Examiner, Art Unit 3752